

STATE OF MAINE DEPARTMENT OF TRANSPORTATION 16 STATE HOUSE STATION AUGUSTA, MAINE 04333-0016

Bruce A. Van Note

COMMISIONER

January 7, 2020

Subject: Presumpscot Falls Bridge

Rehabilitation

State WIN: 022310.00 Location: Falmouth Amendment No. 2

Dear Sir/Ms:

The following question has been received:

Question: Does protective coating need to be applied to the underside of the concrete bridge beams and all concrete piers?

Response: Protective coating is not to be applied to the underside of the precast deck and is to be applied to all the concrete piers.

Question: Can a pavement milling machine be used to remove the 2" of existing concrete overlay on the bridge deck?

Response: Yes, a milling machine may be used to remove 2" of the existing concrete overlay.

Question: In reference to Sheet No 5, Abutment Joint Detail, what is the required depth of the saw cut and removal?

Response: The saw cut and removal depth shall be sufficient to place the 2" Expansion Device – Silicone Coated and Pre-compressed Foam in accordance with Special Provision 520. The final depth shall be determined based on the expansion device selected and as directed by the Resident.

Question: In reference to Sheet No 6, Detail A, what is the required depth and width of the sawcut?

Response: The required depth of width of the sawcut shall be as necessary to remove the concrete plug and as directed by the Resident. See Special Provision 520 – Bridge Joint Modification for additional information related to this work.

Question: Is there any specific requirements for the transverse construction joints for the proposed 5-inch concrete overlay?

Response: The concrete overlay shall be placed in one continuous placement with no transverse construction joints.

Question: In reference to Item 202.12 Removing Existing Structural Concrete, where is this work located?

Response: Item 202.12 – Removing Existing Structural Concrete is for the partial removal of the concrete approach slabs, as shown in the Proposed Abutment Section on Sheet 7.

Question: How does the necessary removal of existing pavement markings and temporary pavement markings pay?

Response: Removal of the existing pavement markings and temporary pavement markings will not be paid for separately and shall be incidental to related Contract Items.

Question: Are the two existing 4-inch diameter communication conduits located in the existing curbs on both sides of the bridge designed to accommodate the 1-inch jacking height?

Response: Based on the information in the existing plans, there are two 4-inch diameter conduits in the concrete curb on the east side of the bridge and no conduits in the curb on the west side of the bridge. The bridge rail posts and curb concrete on the top of each east wingwall shall be removed to allow the conduit to more easily move vertically during jacking operations. The Contractor shall remove the existing rail posts and carefully remove the existing curb concrete to the existing construction joint immediately below the curb. The existing reinforcing steel in the curbs shall remain. Once the jacking operations are complete and the bridge has been reset on its bearings, the Contractor shall replace the curb concrete, reset the bridge rail posts, and replace and/or reset any incidental materials removed or damaged as part of the curb removal and jacking as directed by the Resident. All costs for this work shall be paid for as incidental to Item 524.301 – Temporary Structural Support – Bridge.

Question: In reference to sheet 7 and the note to cut and remove the existing #8 dowel, due to the location of the 4-inch diameter communication conduits in the bridge curb the top of the #8 dowels at in the fascia beam are not accessible. Can the MDOT provide a drawing and details for the removal of the #8 dowel in the fascia beams?

Response: The Contractor shall carefully remove the existing curb concrete, as necessary, to expose the tops of the dowels in the fascia beams. Based on the existing plans, the dowels are anticipated to be located 9 inches from the end of the fascia beams. The Contractor shall carefully remove approximately 12 inches of the curb concrete from each exterior beam end, that should allow for the removal of the dowels. The existing reinforcing steel in the curbs shall remain. Once the dowel removal is complete, the Contractor shall replace the curb concrete, as directed by the Resident. All costs for this work shall be incidental to Item 523.26 – Expansion Bearing – Modification.

Question: Page 5 of 14, Abutment Joint Detail shows saw cutting the existing Curb and Backwall 2". Is this work to be paid for under Item 202.128? If not, what removal areas will be paid for under item 202.128.

Response: Yes, removal of the existing concrete for the placement of the joint seal is included in Item 202.128.

Question: Relative to the work for item 524.301, all beams at each abutment must be lifted simultaneously. The best way to do this without exceeding the allowable height differentials between adjacent beams (1/8") is to use a header beam in contact with the underside of the beams. To allow space for access for the work to be done, will this beam be able to support the ends of the beams at the abutment if it is located 5' from the beam ends beneath the voids in the beams? Is the engineer concerned with the structural capacity of these beams to bear on a section of the beam offset from the centerline of bearing? If a 5' offset is not acceptable, what is the maximum allowable offset so as to not damage the existing beams?

Response: The Contractor is responsible for checking the capacity of the existing structure during jacking operations based on their proposed jacking method.

Question: What will be the patch repair detail for the top of the abutment bridge seat if chipping is required to access the #8 dowels? Will a full abutment width (18") patch be required?

Response: All details for chipping and patching the abutments in order to remove the #8 dowels in the abutment including, but not limited to, extent of concrete removal, method of cutting and removing dowels, and any repair materials shall be included in a submittal for this work.

Question: Will MDOT allow a 1/4" aggregate high-density pumpable grout as a bridge seat patch material for the areas that must be chipped out to access the #8 dowels?

Response: See the response to the previous question.

Question: Will the temporary support systems for item 524.301 (bridge) be allowed to be supported off a temporary spread footing on the ground?

Response: The Department takes no exception to supporting the temporary structural support systems on temporary spread footings on the ground. The Contractor is responsible for the design and detailing of the temporary structural support systems. If the temporary structural support systems are supported on temporary spread footings on the ground, the Contractor is responsible for confirming that the ground has adequate soil bearing capacity.

Question: The existing precast voided slab shop drawings show 4 - 5" lifting loops for each panel. Were these lifting loops removed flush to the top of panel, were they partially cut or are they still inplace?

Response: The Department does not have that information available at this time.

Consider these changes and information prior to submitting your bid on January 8, 2020.

Sincerely,

George M. A. Macdougall P.E.

Contracts & Specifications Engineer